(19) World Intellectual Property Organization International Bureau



- 1 TO BEER BOULDER IN CHESTER COLD FROM A COLD COLD IN COLD IN

(43) International Publication Date 25 August 2005 (25.08.2005)

PCT

(10) International Publication Number WO 2005/077933 A1

- (51) International Patent Classification⁷: C07D 401/04, A61K 31/505 // (C07D 401/04, 239:00, 213:00)
- (21) International Application Number:

PCT/IN2004/000352

(22) International Filing Date:

16 November 2004 (16.11.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 105/CHE/2004

11 February 2004 (11.02.2004) R

(71) Applicant (for all designated States except US): NATCO PHARMA LIMITED [IN/IN]; "Natco House", Road NO.2, Banjara Hills, Hyderabad, Andhra Pradesh 500033 (IN).

(71) Applicants and

(72) Inventors: AMALA, Kompella [IN/IN]; Natco Pharma Limited, "Natco House", Road NO.2, Banjara Hills, Hyderabad, Andhra Pradesh 500033 (IN). SRINIVASA RAO, Thungathurthi [IN/IN]; Natco Pharma Limited, "Natco House", Road No.2, Banjara Hills, Hyderabad, Andhra Pradesh 500033 (IN). ADIBHATLA KALI SATYA, Bhujanga rao [IN/IN]; Natco Pharma Limited, "Natco House", Road No.2, Banjara Hills, Hyderabad, Andhra Pradesh 500033 (IN). RACHAKONDA, Sreenivas [IN/IN]; Natco Pharma Limited, "Natco House", Road No.2, Banjara Hills, Hyderabad, Andhra Pradesh 500033 (IN). VENKAIAH CHOWDARY, Nannapaneni [IN/IN]; NATCO PHARMA LIMITED, "NATCO HOUSE", ROAD NO.2, BANJARA HILLS, HYDER-ABAD, ANDHRA PRADESH 500033 (IN). PODILI, Khadgapathi [IN/IN]; Natco Pharma Limited, "Natco House", Road No.2, Banjara Hills, Hyderabad, Andhra Pradesh 500033 (IN).

- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: NOVEL POLYMORPHIC FORM OF IMATINIB MESYLATE AND A PROCESS FOR ITS PREPARATION

(57) Abstract: This invention discloses a novel stable crystal form of imatinib mesylate, designated by us as α_2 Form, which is stable at room temperature and even at higher temperatures upto 120 °C and accelerated stress conditions and, freely soluble in water. This invention also discloses a pharmaceutical composition containing the novel stable α_2 form of Imatinib mesylate and other usually employed excipients, useful in the treatment of Chronic Myelogenous Leukemia (CML). This new α_2 Form of imatinib mesylate is prepared by slurrying Imatinib base in isopropanol at room temperature followed by addition of methane sulfonic acid and maintaining 50-60 °C followed by filtration. This invention also discloses another process for the preparation of the novel, stable α_2 crystalline form of Imatinib Mesylate by the conversion of Imatinib mesylate β -polymorphic modification by suspending it in water and organic solvents, distilling off water azeotropically, cooling and filtering to obtain the α_2 crystal form.



